New claims:

- 1. A process for eliminating defects (3) in a grain layer (2) of a full-grain leather (1), a plastics compound being applied to the defects (3), wherein an aqueous, if appropriate lightly foamed, plastics dispersion which comprises very small compact particles is pressed into the defects (3) and the leather (1) is then dried, whereupon the grain layer (2) is subjected to a pressure and heat treatment, with the result that hollow microspheres (5) are at least partly formed from the compact particles in the solidified plastics dispersion.
- 2. The process according to claim 1, wherein the leather is cattle leather.
- 3. The process according to claim 1 or 2, wherein the plastics dispersion is pressed into the defects (3) by means of an application roll having, if appropriate, a finely structured surface.
- 4. The process according to any of claims 1 to 3, wherein the application roll is a counterrotating application roll.
- 5. The process according to any of claims 1 to 4, wherein the pressure and temperature treatment is effected using a pressure roll which is heated to a temperature of at least 100°C and makes contact with the grain layer (2).
- 6. The process according to any of claims 1 to 5, wherein the pressure roll is heated to a temperature from 120°C to 180°C.
- 7. The process according to any of claims 1 to 6, wherein the pressure roll has a finely structured surface.
- 8. The process according to any of claims 1 to 7, wherein compact particles having a size of less than 10 μ m are used in an amount of from 15 g to 60 g, based on 1 kg of a 40% strength plastics dispersion.
- 9. The process according to any of claims 1 to 8, wherein compact particles comprising a thermoplastic, which comprise a liquid blowing agent, are used.
- 10. The process according to any of claims 1 to 9, wherein compact particles which expand at a temperature below 120°C are used.

- 11. The process according to any of claims 1 to 10, wherein a mixture of water and a solvent is applied to the solidified plastics dispersion and a pressure and heat treatment is then effected.
- 12. The process according to any of claims 1 to 11, wherein a mixture of water and a solvent is sprayed onto the solidified plastics dispersion and a pressure and heat treatment is then effected.
- 13. The process according to either of claims 11 and 12, wherein the solvent is ethyl acetate.
- 14. The process according to either of claims 11 and 13, wherein the mixture comprises 90 parts of water and 10 parts of solvent.
- 15. The process according to any of claims 1 to 14, wherein pigmented compact particles whose color corresponds to that of the grain layer and/or of the plastics dispersion are used.
- 16. A full-grain leather, which has on parts of its grain layer, defects which are corrected by means of a plastics filling compound, wherein the plastics filling compound consists of a solidified, aqueous plastics dispersion which is comprises hollow microspheres (5) formed from compact particles by supplying heat and is pressed into the defects on application.
- 17. The full-grain leather according to claim 16, which is cattle leather.
- 18. The full-grain leather according to claim 16 or 17, wherein the formation of the hollow microspheres (5) in the region adjacent to the surface (4) of the grain layer is greater than in the region further away from this surface (4).